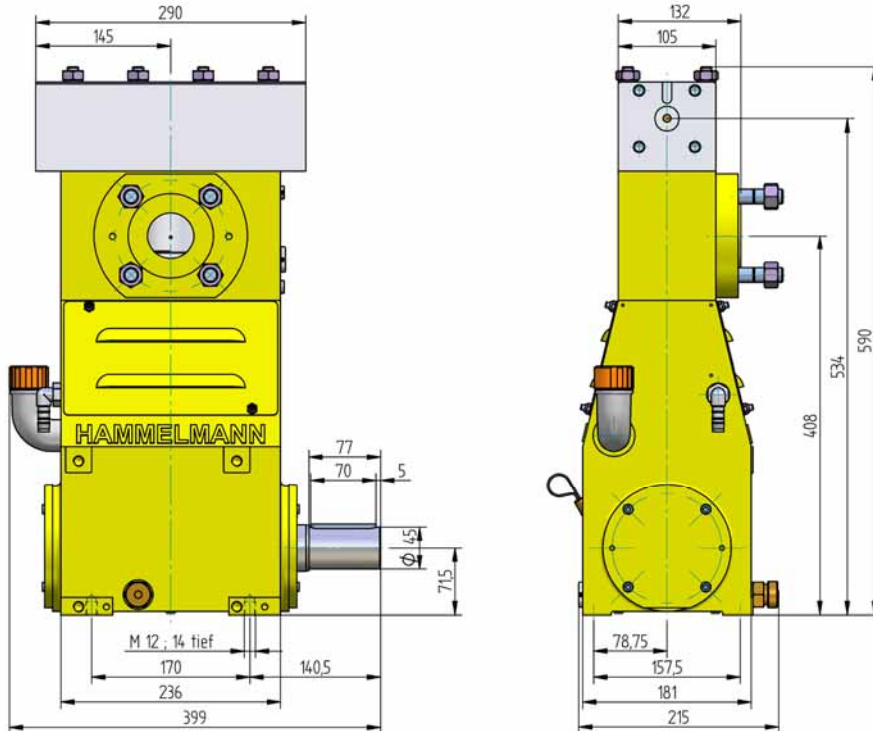


HDP 10 High Pressure Pump Series

Hammelmann process pumps are built to operate at continuous maximum duty. Just compare the crank shaft speed, average plunger speed and power rating.

High Pressure Pump

Weight: 210 lbs



Energy efficient →



Features

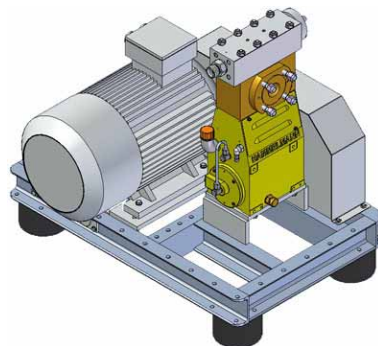
- Power ratings up to 15 HP
- Vertical 3 cylinder design

Quality and reliability

- Crank section calculation by 'Finite element method' ensures long working life under continuous load
- Splash lubricated crank section
- Bellows form hermetic seal between the suction chamber and crank section
- Stainless steel or bronze suction chamber
- Solid ceramic or tungsten carbide plungers
- Stainless steel pump head free of alternating stress
- Choice of performance and pumped medium specific seal and pump head assemblies
- Flow control achieved with variable speed gear or frequency converter
- Flow turndown ratio 1:10

Stationary unit with electric motor

Length: 39 inch
 Width: 29 inch
 Height: 35 inch
 Weight: approx. 820 lbs at 15 HP



Main dimensions without accessories such as suction line, pressure regulator etc. All shown as right side drive. Detailed dimensional drawings and weights available on request.

HDP 10 series, technical data

Performance parameters

Q [GPM]*7	Required power rating [HP]			D	r.p.m.	
	5,5	10	15		n ₁	n ₂
	Operating pressure [psig]					

0.6	15950	21800	31900	8	1500/1800/2150	625
0.7	13100	18100	26800			750
0.8	11200	15200	22500			900
0.9	10200	13800	20300	10	1500/1800/2150	625
1.1	8300	11300	16700			750
1.3	7100	9800	14200			900

0.9	10200	13800	20300	10	1500/1800/2150	625
1.1	8300	11300	16700			750
1.3	7100	9800	14200			900
1.7	6800	9300	13600	12	1500/1800/2150	625
1.8	5800	8000	11700			750
2.1	5100	7000	10300			900
2.4	5000	6100	9100	15	1500/1800/2150	625
2.9	3800	5100	7500			750
3.2	3200	4400	6500	17,5	1500/1800/2150	625
4.0	2800	3600	5500			750
4.2	2500	3400	5100	20	1500/1800/2150	625
5.3	2100	2800	4200			750
6.6	1600	2200	3200	25	1500/1800/2150	625
8.2	1400	1900	2800			750
9.8	1100	1500	2200	30	1500/1800/2150	625
11.9	1300	1700	2600			750
13.5	800	1100	1700	35	1500/1800/2150	625
16.4	700	900	1400			750
18.0	600	800	1200	40	1500/1800/2150	625
21.6	500	700	1100			750
22.7	500	700	1000	45	1500/1800/2150	625
27.2	400	500	800			750

- Rod force: 2,600 lbf
- Stroke: 1.18 inch
- Mean piston speed at n₂
 - 625 r.p.m. = 2.1 feet/sec
 - 750 r.p.m. = 2.5 feet/sec
 - 900 r.p.m. = 3.0 feet/sec



Hammelmann plunger pumps convert 93 to 98 % of the shaft power to hydraulic energy.

Conversion table

Rating 1 hp = 0,746 kW
 Op.pressure 1 psi = 0,069 bar
 Flow rate 1 gpm = 0,227 m³/h

D = Piston/Plunger dia. [mm]

n₁ = Motor/Engine r.p.m.

n₂ = Crankshaft r.p.m.

Type designations

Sealing system	D	HDP Type
Hydrodynamic with tungsten carbide plungers	8 - 10	14
Labyrinth with solid ceramic plungers	10 - 45	12
Packed sleeves with solid ceramic plungers	10 - 45	17

D = Piston/Plunger dia. [mm]

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